

Claims

- [c1] An extendable conveying system for loading product to or unloading product from a trailer, comprising:
an extendable section;
a conveying surface defined by said extendable section;
a pullout section that defines a support surface, said pullout section having an extended position and a retracted position, said support surface at least partially extended from said conveying surface when said pullout section is in said extended position; and
an energy-storing device connected with said pullout section and said extendable section, said energy-storing device storing energy as said pullout section is moving from one of said extended and retracted positions to the other of said extended and retracted positions, said energy-storing device delivering energy to said pullout section as said pullout section is moving from said other of said extended and retracted positions to said one of said extended and retracted positions.
- [c2] The system of claim 1 wherein said support surface comprises at least one selected from another conveying surface and a non-conveying surface.

- [c3] The system of claim 1 wherein said support surface comprises a gravity roller-conveying surface.
- [c4] The system of claim 1 wherein said conveying surface comprises an accumulation conveyor.
- [c5] The system of claim 1 wherein said energy-storing device comprises a spring assembly.
- [c6] The system of claim 5 wherein said spring assembly comprises a constant force spring assembly.
- [c7] The system of claim 5 wherein said spring assembly comprises a negator spring assembly.